

## ABSTRACT

### Power transmission device and process implementing such device

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The present invention concerns essentially a power transmission device (1) between a shaft (2) of a thermal engine (3) and a shaft (4) of wheels (5). This transmission device (1) comprises a first and a second electric machine (6, 7), as well as a mechanical assembly (9). In a first mode of operation, the first machine (6) is connected to an element (27) of the assembly (9) and the second machine (7) is connected to a shaft (4) of the wheels (5). In a second mode of operation, the first machine (6) is connected to the element (27) of the assembly (9) and the second machine (7) is connected to another element (26) of the ensemble (9). In a third mode of operation, the shaft (10) of the first machine (6) is connected to the shaft (4) of the wheels (5) and the shaft (11) of the second machine (7) is connected to the other element (26).

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Figure 1